

DETAILED ACTION

1. This Office Action is made in response to applicant's amendment filed on 02/19/2010. Claims 124-136 and 138-140 are currently pending in the application. An action follows below:

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 124-136 and 138-140 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claim 124, this claim recites a limitation, "calculating a tracking confidence value representative of a ratio between the measured tracking value and the projected tracking value" in lines 12-13, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The disclosure, specifically the specification at paragraph [0113] and a formula of "alpha" on page 65, explicitly discloses the tracking confidence value "alpha" determined based on the illumination value "illumination". Accordingly, the original disclosure does not contain such description and details regarding to the above underlined limitation of this claim, so as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Furthermore, claim 124 recites a limitation, "generating an enhanced tracking value representative of a summation of the tracking confidence value multiplied by the measured tracking value and the inverse of the tracking confidence value multiplied by the projected tracking value" in lines 14-16, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The disclosure, specifically the specification at paragraph [0115], explicitly discloses the enhanced tracking values calculated based on the equations:

$$dx = (Mdx)*\alpha + (1.0-\alpha)*Pdx \quad [\text{Eq. 1}]$$

$$dy = (Mdy)*\alpha + (1.0-\alpha)*Pdy \quad [\text{Eq. 2}]$$

However, the original disclosure does not explicitly disclose "(1.0-alpha)" corresponding to the "claimed" inverse of the tracking confidence value. Note that the term, "the inverse of the tracking confidence value", is not found in the original disclosure. Accordingly, the original disclosure does not contain such description and details regarding to the above underlined limitation of this claim, so as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claims 125-136 and 138-140, since these claims depend upon claim 124, these claims are therefore rejected for the same reason set forth in claim 124 above.

Response to Arguments

4. Applicant's arguments, see pages 12-16 of the amendment filed on 2/19/2010, with respect to the rejections under 35 USC 101 and 102 in the Office Action dated 9/15/2009, have been fully considered and are persuasive in light of the amendment to independent claim 124. However, upon further consideration, the new ground of rejection is made above.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is 571-272-7675. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jimmy H Nguyen/

Primary Examiner, Art Unit 2629